MATERIAL SAFETY DATA SHEET

NPCA 1-72

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

## SECTION I

DeSOTO, INC. Administrative and Research Center

1700 South Mt. Prospect Road Des Plaines, Illinois 60018

Emergency Telephone

312-391-9000

Product Class: POLYISOCYANATE

DMS 2115

COUPONENT II

Manufacturers Code Identification

910 X 376

Trade Name SUPER DESOTHANE

Date of Prep 5/05/83 Supersedes 1/17/83 MSDS

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*********	SECTION II-HA	ZARDOUS	INGREDIENTS *************				
INGREDIENT	PERCENT* BY WEIGHT	PPM	TLV MG/M <sup>3</sup>	LEL	VAPOR PRESSURE @20° C.		
2-Ethoxyethyl Acetate-S	Skin <b>**</b> 30	50	270	1.8	2.0		
Cyclohexanone	5	25	100	1.1	3.4		
Methyl Ethyl Ketone	30	200	590	1.8	70		
Xylene - Skin	5	100	435	1.1	10.0		
Aliphatic Polyisocyana	te <b>***</b> 30	NE	NE	NE	NE		

<sup>\*</sup> Percent By Weight: To nearest 5%, plus or minus 5%, for substances 5-95%; <5.0 for substances 0.5-5%; <0.5 for substances 0.0-0.5%.

\*\*\*Hexamethylene diisocyanate (HDI) content less than 0.7% based on resin solids at time of manufacture. However, after 3 to 6 months storage, the free monomer content may rise to a maximum of 1.6%.

TLV not established for HDI but 0.02 ppm followed

NE = Not Established				NA = Not Applicable
****************	SECTION	III-PHYSICAL	DATA	**************************************

PROPERTY

MEASUREMENT

Boiling Range

176-313° F. 80-156° C.

@760 MM Hg

Vapor Density X Heavier Li

Lighter Than Air

Weight Per Gallon

7.8 Lbs.

Percent Volatile By Volume

75

Evaporation Rate

Faster

X Slower Than Ether

<sup>\*\*</sup>ACGIH notice of intended change, 1982: TLV-TWA = 5 ppm.

\*\*\*\*\*\*\*\* SECTION IV-FIRE AND EXPLOSION DATA \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

DOT Category

FLAMMABLE LIQUID

OSHA Category FLAMMABLE LIQUID CLASS 1B

Flash Point (Closed Cup)

33° F. 0.6° C.

Lower Explosive Limit

See II

EXTINGUISHING MEDIA: Use National Fire Protection Association Class B extinguishers (Carbon dioxide, dry chemical or foam)

UNUSUAL FIRE AND EXPLOSION HAZARDS: During a fire irritating and/or toxic gases and aerosols from the decomposition/combustion products may be present.

SPECIAL FIRE FIGHTING PROCEDURES: Full emergency equipment should be worn. Spray drums of material involved in fire but not themselves on fire with water to minimize risk of rupture. Wear NIOSH approved self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

THRESHOLD LIMIT VALUE: See II (Not Established for Product)

EFFECTS OF OVEREXPOSURE: Anesthetic. Irritation of the Inhalation: respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. Others as noted in Sec. IX.

SKIN OR EYE CONTACT: Primary Irritation.

OTHER HEALTH EFFECTS: Reproductive and blood disorders and birth defects have been observed in tests on laboratory animals with 2-methoxyethanol, 2ethoxyethanol and 2-ethoxyethyl acetate. Because this product contains at least one of these solvents, handling precautions as outlined in sections VIII and IX should be carefully followed to avoid overexposure.

EMERGENCY AND FIRST AID PROCEDURES: Inhalation: Remove from exposure. Restore breathing. Keep warm and quiet. Notify a physician. Skin Contact: Wash affected areas with water. Remove contaminated clothing. physician. Eye Contact: Flush with water for 15 minutes. Consult a physician.

INGESTION: Consult a physician.

STABILITY:

Unstable

X Stable

INCOMPATABILITY (Materials to Avoid): Avoid contact with water, alcohols, amines, and other materials which react with isocyanates.

HAZARDOUS DECOMPOSITION PRODUCTS: By fire CO2, CO, Oxides of Nitrogen, possibility of cyanides.

Hazardous Polymerization

May occur X Will not occur

Conditions to Avoid:

\*\*\*\*\*\* SECTION VII-SPILL OR LEAK PROCEDURES \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Cover the spill with absorbent material, such as sand, sweeping compound or diatomaceous earth; collect material in open top drum and take to isolated area, out of doors preferred, fill drum with water; neutralize spill area with dilute solution of ammonium hydroxide.

WASTE DISPOSAL METHOD: Waste material can be incinerated or disposed of in accordance with Federal, State or Local regulations regarding environmental control after allowing time for reaction with water.

\*\*\*\*\*\* SECTION VIII-SPECIAL PROTECTION INFORMATION \*\*\*\*\*\*\*\*\*\*

RESPIRATORY PROTECTION: Use a respirator that is approved or recommended for use in isocyanate containing environments (air purifying or fresh air supplied)

VENTILATION: Where employees may be exposed, provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients in Section II below recommended (ACGIH) or regulated (OSHA) limit. Where employees will not be exposed, keep LEL in Section II below 25% of limit.

PROTECTIVE GLOVES: Butyl rubber preferred. Neoprene or nitrile acceptable.

EYE PROTECTION: Splash proof goggles and/or face shield.

OTHER PROTECTIVE EQUIPMENT: Protective clothing such as butyl rubber apron. Neoprene or nitrile acceptable. A safety shower, an eye bath, and washing facilities should be available.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep away from heat, sparks, and open flame. Store in tightly closed container and protect from moisture and foreign materials. At max. storage temperature noted, material may slowly polymerize without hazard. Ideal storage temperature range is  $10^{\circ}\text{C}$ .  $-27^{\circ}\text{C}$ .  $(50^{\circ}\text{F}$ .  $-81^{\circ}\text{F}$ .)

OTHER PRECAUTIONS: Inhalation of isocyanates can cause allergic sensitization. Symptoms may include mucous membrane irritation, tightness of chest, irritation of respiratory tract, coughing, headache and shortness of breath. Asthma-like attacks may follow. See Section VIII instructions.

Prepared by: S. M. Stevenson